

1st Amendment Under Article 34

CLAIMS

1. (Amended) A routing guide system for displaying an image of a predetermined guide point on a traveling road of a mobile body, comprising:

storage means installed outside said mobile body for storing data of images at a plurality of guide points;

distance detection means for detecting a distance from a current position of said mobile body to a next guide point;

image request generation means for making an image request for said next guide point when the distance detected by said distance detection means becomes a first predetermined distance or less;

transmission means installed outside said mobile body for reading the image of said next guide point from said storage means in response to said image request, and sending the image to said mobile body; and

display control means for causing said mobile body to receive the image transmitted from said transmission means, and causing a display device to display the image,

wherein said mobile body is a vehicle,

said distance detection means and said image request generation means are installed in a terminal device mounted in said vehicle, along with said display means and said display

control means,

said storage means and transmission means are elements of a server installed outside said vehicle,

a camera is provided in said terminal device,

said terminal device further comprises a transmission unit for sending the image in front of the vehicle captured by said camera to said server along with additional information comprising the current position of said vehicle, a heading direction of said vehicle and said next guide point when the distance detected by said distance detection means becomes not more than a third predetermined distance that is shorter than said second predetermined distance,

said server comprises:

receive means for receiving the image and additional information transmitted from said transmission unit of said terminal device;

image judgment means for determining whether an image that satisfies image conditions including the current position, heading direction and guide point, specified in the additional information received by said receive means, is stored in said storage means;

means for storing the data of image received by said receive means in said storage means when said judgment means determines that the image that satisfies said image conditions is not found in said storage means;

identification degree setting means for setting an identification degree of a guide point indicated by an image received by said receive means according to said received image;

target object judgment means for applying a matching process between the existing image stored in said storage means and said received image when said judgment means determines that the image satisfying said image conditions exists in said storage means, so as to determine whether a target object at the guide point has changed; and

means for storing data of said received image in said storage means if said target object judgment means determines that the target object at the guide point has changed.

2. (Cancelled)

3. (Amended) The routing guide system according to Claim 1 ~~or~~ 2, wherein said image request includes the current position of said mobile body, a heading direction of said mobile body, and the next guide point as information.

4. (Amended) The routing guide system according to Claim 2 ~~or~~ 3, wherein said terminal device further comprises route setting means for setting a route from the current position of the vehicle to the destination, and said distance detection means measures the distance from the current position of the vehicle to the next guide point on the route being set by said route setting means.

5. (Amended) The routing guide system according to Claim ~~2,~~ 3 or 4, wherein said terminal device further comprises a camera for capturing an image in front of the vehicle, and said display control means causes said display device to display the image in front of said vehicle captured by said camera when the distance detected by said distance detection means becomes not more than a second predetermined distance that is shorter than said first predetermined distance.

6. (Cancelled)

7. (Cancelled)

8. (Amended) The routing guide system according to Claim ~~7~~ 1, wherein said server further comprises:

identification degree judgment means for determining whether the identification degree of said received image is higher than the identification degree of said existing image if said target object judgment means determines that the target object at the guide point has not changed; and

means for storing data of said received image in said storage means if said identification degree judgment means determines that the identification degree of said received image is higher than the identification degree of said existing image.

9. (Cancelled)

10. (Cancelled)

2nd Amendment Under Article 34

New claims 11 to 16 have been added.

11. (New) A server for managing an image of a predetermined guide point on a traveling road of a vehicle, comprising:

storage means;

receiving means for receiving the image from a terminal device provided in the vehicle;

identification degree setting means for setting an identification degree of a guide point indicated by the image received by said receiving means according to said received image;

target object judgment means for applying a matching process between an existing image stored in said storage means and said received image when the image satisfying an image condition exists in said storage means, so as to determine whether a target object at the guide point has changed, said image condition being included in additional information appended to said received image; and

means for storing data of said received image in said storage means together with the identification degree of the guide point, if said target object judgment means determines that the target object at the guide point has changed.

12. (New) The server according to Claim 11 further comprising:

identification degree determination means for determining whether an identification degree of the received image is higher than an identification degree of the existing image, if the target object judgement means determines that the target object at the guide point has not changed; and

means for storing data of said received image in said storage means together with the identification degree of the guide point, if said identification degree determination means determines that the identification degree of the received image is higher than the identification degree of the existing image.

13. (New) The server according to Claim 11, wherein said image condition includes the current position of said vehicle, a heading direction of said vehicle, and the guide point.

14. (New) The server according to Claim 11 further comprising transmission means for reading an image of a next guide point from the storage means and transmitting the image of the next guide point to said terminal device in response to an image request generated from said terminal device, when a distance from the current position of said vehicle to the next guide point is within a first predetermined distance.

15. (New) The server according to Claim 14, wherein the image received by said receiving means from said terminal device is an image in front of said vehicle captured by a camera provided at said terminal device, when the distance

from the current position of the vehicle to the next guide point is within a second predetermined distance which is shorter than said first predetermined distance.

16. (New) The server according to Claim 11 further comprising means for storing data of said received image in said storage means together with the identification degree of the guide point, if the image satisfying the image condition does not exist in the storage means.